

1. *Chlorophyll a* (Chl *a*)  
 2. *Chlorophyll b* (Chl *b*)  
 3. *Chlorophyll c* (Chl *c*)  
 4. *Chlorophyll d* (Chl *d*)  
 5. *Chlorophyll e* (Chl *e*)  
 6. *Chlorophyll f* (Chl *f*)  
 7. *Chlorophyll g* (Chl *g*)  
 8. *Chlorophyll h* (Chl *h*)  
 9. *Chlorophyll i* (Chl *i*)  
 10. *Chlorophyll j* (Chl *j*)  
 11. *Chlorophyll k* (Chl *k*)  
 12. *Chlorophyll l* (Chl *l*)  
 13. *Chlorophyll m* (Chl *m*)  
 14. *Chlorophyll n* (Chl *n*)  
 15. *Chlorophyll o* (Chl *o*)  
 16. *Chlorophyll p* (Chl *p*)  
 17. *Chlorophyll q* (Chl *q*)  
 18. *Chlorophyll r* (Chl *r*)  
 19. *Chlorophyll s* (Chl *s*)  
 20. *Chlorophyll t* (Chl *t*)  
 21. *Chlorophyll u* (Chl *u*)  
 22. *Chlorophyll v* (Chl *v*)  
 23. *Chlorophyll w* (Chl *w*)  
 24. *Chlorophyll x* (Chl *x*)  
 25. *Chlorophyll y* (Chl *y*)  
 26. *Chlorophyll z* (Chl *z*)  
 27. *Chlorophyll aa* (Chl *aa*)  
 28. *Chlorophyll ab* (Chl *ab*)  
 29. *Chlorophyll ac* (Chl *ac*)  
 30. *Chlorophyll ad* (Chl *ad*)  
 31. *Chlorophyll ae* (Chl *ae*)  
 32. *Chlorophyll af* (Chl *af*)  
 33. *Chlorophyll ag* (Chl *ag*)  
 34. *Chlorophyll ah* (Chl *ah*)  
 35. *Chlorophyll ai* (Chl *ai*)  
 36. *Chlorophyll aj* (Chl *aj*)  
 37. *Chlorophyll ak* (Chl *ak*)  
 38. *Chlorophyll al* (Chl *al*)  
 39. *Chlorophyll am* (Chl *am*)  
 40. *Chlorophyll an* (Chl *an*)  
 41. *Chlorophyll ao* (Chl *ao*)  
 42. *Chlorophyll ap* (Chl *ap*)  
 43. *Chlorophyll aq* (Chl *aq*)  
 44. *Chlorophyll ar* (Chl *ar*)  
 45. *Chlorophyll as* (Chl *as*)  
 46. *Chlorophyll at* (Chl *at*)  
 47. *Chlorophyll au* (Chl *au*)  
 48. *Chlorophyll av* (Chl *av*)  
 49. *Chlorophyll aw* (Chl *aw*)  
 50. *Chlorophyll ax* (Chl *ax*)  
 51. *Chlorophyll ay* (Chl *ay*)  
 52. *Chlorophyll az* (Chl *az*)  
 53. *Chlorophyll aza* (Chl *aza*)  
 54. *Chlorophyll abz* (Chl *abz*)  
 55. *Chlorophyll acz* (Chl *acz*)  
 56. *Chlorophyll adz* (Chl *adz*)  
 57. *Chlorophyll aez* (Chl *aez*)  
 58. *Chlorophyll afz* (Chl *afz*)  
 59. *Chlorophyll agz* (Chl *agz*)  
 60. *Chlorophyll ahz* (Chl *ahz*)  
 61. *Chlorophyll aiz* (Chl *aiz*)  
 62. *Chlorophyll ajz* (Chl *ajz*)  
 63. *Chlorophyll akz* (Chl *akz*)  
 64. *Chlorophyll alz* (Chl *alz*)  
 65. *Chlorophyll amz* (Chl *amz*)  
 66. *Chlorophyll anz* (Chl *anz*)  
 67. *Chlorophyll aoz* (Chl *aoz*)  
 68. *Chlorophyll apz* (Chl *apz*)  
 69. *Chlorophyll aqz* (Chl *aqz*)  
 70. *Chlorophyll arz* (Chl *arz*)  
 71. *Chlorophyll asz* (Chl *asz*)  
 72. *Chlorophyll atz* (Chl *atz*)  
 73. *Chlorophyll auz* (Chl *auz*)  
 74. *Chlorophyll avz* (Chl *avz*)  
 75. *Chlorophyll awz* (Chl *awz*)  
 76. *Chlorophyll axz* (Chl *axz*)  
 77. *Chlorophyll ayz* (Chl *ayz*)  
 78. *Chlorophyll azz* (Chl *azz*)  
 79. *Chlorophyll azaa* (Chl *aza*)  
 80. *Chlorophyll abz* (Chl *abz*)  
 81. *Chlorophyll acz* (Chl *acz*)  
 82. *Chlorophyll adz* (Chl *adz*)  
 83. *Chlorophyll aez* (Chl *aez*)  
 84. *Chlorophyll afz* (Chl *afz*)  
 85. *Chlorophyll agz* (Chl *agz*)  
 86. *Chlorophyll ahz* (Chl *ahz*)  
 87. *Chlorophyll aiz* (Chl *aiz*)  
 88. *Chlorophyll ajz* (Chl *ajz*)  
 89. *Chlorophyll akz* (Chl *akz*)  
 90. *Chlorophyll alz* (Chl *alz*)  
 91. *Chlorophyll amz* (Chl *amz*)  
 92. *Chlorophyll anz* (Chl *anz*)  
 93. *Chlorophyll aoz* (Chl *aoz*)  
 94. *Chlorophyll apz* (Chl *apz*)  
 95. *Chlorophyll aqz* (Chl *aqz*)  
 96. *Chlorophyll arz* (Chl *arz*)  
 97. *Chlorophyll asz* (Chl *asz*)  
 98. *Chlorophyll atz* (Chl *atz*)  
 99. *Chlorophyll auz* (Chl *auz*)  
 100. *Chlorophyll avz* (Chl *avz*)  
 101. *Chlorophyll awz* (Chl *awz*)  
 102. *Chlorophyll axz* (Chl *axz*)  
 103. *Chlorophyll ayz* (Chl *ayz*)  
 104. *Chlorophyll azz* (Chl *azz*)  
 105. *Chlorophyll azaa* (Chl *aza*)  
 106. *Chlorophyll abz* (Chl *abz*)  
 107. *Chlorophyll acz* (Chl *acz*)  
 108. *Chlorophyll adz* (Chl *adz*)  
 109. *Chlorophyll aez* (Chl *aez*)  
 110. *Chlorophyll afz* (Chl *afz*)  
 111. *Chlorophyll agz* (Chl *agz*)  
 112. *Chlorophyll ahz* (Chl *ahz*)  
 113. *Chlorophyll aiz* (Chl *aiz*)  
 114. *Chlorophyll ajz* (Chl *ajz*)  
 115. *Chlorophyll akz* (Chl *akz*)  
 116. *Chlorophyll alz* (Chl *alz*)  
 117. *Chlorophyll amz* (Chl *amz*)  
 118. *Chlorophyll anz* (Chl *anz*)  
 119. *Chlorophyll aoz* (Chl *aoz*)  
 120. *Chlorophyll apz* (Chl *apz*)  
 121. *Chlorophyll aqz* (Chl *aqz*)  
 122. *Chlorophyll arz* (Chl *arz*)  
 123. *Chlorophyll asz* (Chl *asz*)  
 124. *Chlorophyll atz* (Chl *atz*)  
 125. *Chlorophyll auz* (Chl *auz*)  
 126. *Chlorophyll avz* (Chl *avz*)  
 127. *Chlorophyll awz* (Chl *awz*)  
 128. *Chlorophyll axz* (Chl *axz*)  
 129. *Chlorophyll ayz* (Chl *ayz*)  
 130. *Chlorophyll azz* (Chl *azz*)  
 131. *Chlorophyll azaa* (Chl *aza*)  
 132. *Chlorophyll abz* (Chl *abz*)  
 133.

[illegible]

387	GAC CCT ACA ACC ATC ATG AAT GCA GAT ATT CTA GCA TAT TGT CAG AAG GAA GGA	405	414	423	432
	D P T T I M N A D I L A Y C Q K E G				
441	TGG TGC AAA TTA GCT TTT TAT CTT CTA GCA TTT TTT TAC TAC CTA TAT GGC ATG	459	468	477	486
	W C K L A F Y L L A F F Y Y L Y G M				
495	ATC TAT GTT TTG GTG AGC TCT TAG AAC AAC ACA CAG AAG AAT TGG TCC AGT TAA	513	522	531	540
	I Y V L V S S				
549	GTG CAT GCA AAA AGC CAC CAA ATG AAG GGA TTC TAT CCA GCA AGA TCC TGT CCA	567	576	585	594
603	AGA GTA GCC TGT GGA ATC TGA TCA GTT ACT TTA AAA AAT GAC TCC TTA TTT TTT	621	630	639	648
657	AAA TGT TTC CAC ATT TTT GCT TGT GGA AAG ACT GTT TTC ATA TGT TAT ACT CAG	675	684	693	702
711	ATA AAG ATT TTA AAT GGT ATT ACG TAT AAA TTA ATA TAA AAT GAT TAC CTC TCG	720	729	738	747
765	TGT TGA CAG GTT TGA ACT TGC ACT TCT TAA GGA ACA GCC ATA ATC CTC TGA ATG	774	783	792	801

FIGURE 1B

819	ATG	CAT	TAA	TTA	CTG	ACT	GTC	CTA	GTA	CAT	TGG	AAG	CTT	TTG	TTT	ATA	GGA	ACT	864
																			855
873	TGT	AGG	GCT	CAT	TTT	GGT	TTC	ATT	GAA	ACA	GTA	TCT	AAT	TAT	AAA	TTA	GCT	GTA	918
927	GAT	ATC	AGG	TGC	TTC	TGA	TGA	AGT	GAA	AAT	GTA	TAT	CTG	ACT	AGT	GGG	AAA	CTT	972
981	CAT	GGG	TTT	CCT	CAT	CTG	TCA	TGT	CGA	TGA	TTA	TAT	ATG	GAT	ACA	TTT	ACA	AAA	1026
1035	ATA	AAA	AGC	GGG	AAT	TTT	CCC	TTC	GCT	TGA	ATA	TTA	TCC	CTG	TAT	ATT	GCA	TGA	1080
1089	ATG	AGA	GAT	TTC	CCA	TAT	TTC	CAT	CAG	AGT	AAT	AAA	TAT	ACT	TGC	TTT	AAT	TCT	1134
1143	TAA	GCA	TAA	GTA	AAC	ATG	ATA	TAA	AAA	TAT	ATG	CTG	AAT	TAC	TTG	TGA	AGA	ATG	1188
1197	CAT	TTA	AAG	CTA	TTT	TAA	ATG	TGT	TTT	TAT	TTG	TAA	GAC	ATT	ACT	TAT	TAA	GAA	1242
1251	ATT	GGT	TAT	TAT	GCT	TAC	TGT	TCT	AAT	CTG	GTG	GTA	AAG	GTA	TTC	TTA	AGA	ATT	1296

FIGURE 1C

200TT0' 2444400T

1305	TGC AGG TAC	TAC AGA TTT	TCA AAA	CTG AAA	GAG AAT	GAG AGA	AAA	TTG TAT	AAC CAT	CCT	1350
		1314		1323		1332		1341			
1359	GCT GTT CCT	TTA GTG CAA	TAC AAT AAA	ACT CTG AAA	TTA AAA	A	3'				
		1368		1377		1386					

FIGURE 1D

1 M A F T F A A F C Y M L A L L L T A A L 1318847  
1 M A F N F T A F T Y I V A L I G D A F L GI 886769

21 I F F A I W H I I A F D E L K T D Y K N 1318847  
21 I F F A I F H V I A F D E L K T D Y K N GI 886769

41 P I D Q C N T L N P L V L P E Y L I H A 1318847  
41 P I D Q C N S L N P L V L P E Y L L H I GI 886769

61 F F C V M F L C A A E W L T L G L N M P 1318847  
61 F L N L L F L F C G E W F S L C I N I P GI 886769

81 L L A Y H I W R Y M S R P V M S G P G L 1318847  
81 L I A Y H I W R Y K N R P V M S G P G L GI 886769

101 Y D P T T I M N A D I L A Y C Q K E G W 1318847  
101 Y D P T T V L K T D T L Y R N M R E G W GI 886769

121 C K L A F Y L L A F F Y Y L Y G M I Y V 1318847  
121 I K L A V Y L I S F F Y Y I Y G M V Y S GI 886769

141 L V S S 1318847  
141 L I S T GI 886769

FIGURE 2

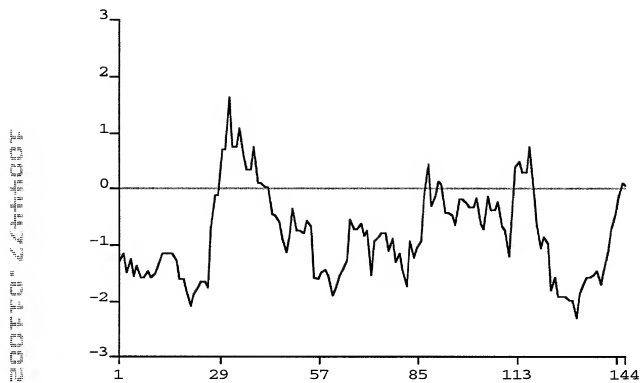


FIGURE 3A

400447.014002

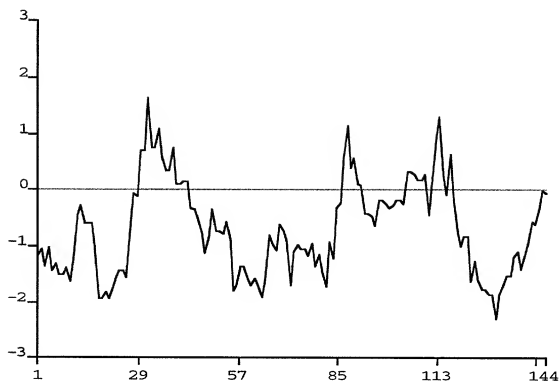


FIGURE 3B